



DOCKET NO: 243460US26YA

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :

DAVID L. O'MEARA, ET AL.

: EXAMINER: COLEMAN, W.

SERIAL NO: 10/673,513 :

FILED: SEPTEMBER 30, 2003

: GROUP ART UNIT: 2823

FOR: METHOD FOR MONITORING
STATUS OF SYSTEM COMPONENTS :

REPLY BRIEF

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Appellants respond to the arguments in the December 1, 2006 Examiner's Answer as follows:

Appellants' Brief filed September 5, 2006 argues that the primary reference to Rulkens monitors a processed substrate, which cannot reasonably be interpreted as "monitoring a state of a material deposit on a system component to determine a status of the system component." The "Response to Argument" section of the Examiner's Answer takes the position (for the first time) that it is well known that a film is formed on the view port of a processing chamber, and that the analysis tool of Rulkens monitors changes in intensity of light.¹

Appellants first submit that there is no discussion whatsoever in Rulkens of a film deposited on the optical view port or any surface other than the processed substrate. The Examiner's Answer provides no basis for concluding that the process performed in Rulkens

¹ See Examiner's Answer at page 13, line 11 – page 14, line 3; page 15, line 10 – page 16, line 5.

results in deposition of a film on an optical view port. Further, even assuming this is accepted as true, any changes in intensity in Rulkens are related only to monitoring the processed wafer. Rulkens simply does not disclose monitoring interaction of the light with an optical view port or monitoring a state of a material deposit on the optical view port in order to determine a status of the optical view port.

Appellants' brief argues that there is no motivation to combine Rulkens with Fairbairn et al. because, among other reasons, one of ordinary skill in the art would not or could not use the single wafer optical monitoring system of Rulkens with the batch processing system of Fairbairn et al. The "Response to Arguments" portion of the Examiner's Answer apparently points to column 1, lines 40-45 of Rulkens in support of optical monitoring of a batch of wafers. However, this portion of Rulkens states only that a wafer undergoes a plurality of sequential process steps in different process chambers.² There is no support in Rulkens for optical monitoring of a plurality of wafers (cited as a system component) and, as discussed in Appellants' brief, one of ordinary skill in the art would not optically monitor a single wafer (cited as a system component) in a batch processing system.

In this regard, Appellants note that the Examiner's Answer mischaracterizes Appellants' Appeal Brief as asserting that Rulkens fails to monitor a wafer.³ Appellants acknowledge that Rulkens monitors a wafer, but Rulkens does not disclose monitoring a system component, and if a wafer is considered a system component, then one of ordinary skill in the art would not combine the single wafer optical monitoring system of Rulkens with the batch processing system of Fairbairn et al.

Appellants' Appeal Brief argues that the features of Claims 2-6, 8, 29 and 30-32 are not disclosed in the cited references. The "Response to Argument" portion of the Examiner's Answer does not rebut these arguments in any way.

² See Examiner's Answer at page 14, lines 7-8.

³ Examiner's Answer at page 14, lines 9-15.

For the reasons discussed above and in the Appeal Brief filed September 5, 2006, the rejection of Claims 1-6, 8, 29 and 30-32 is improper and should be withdrawn.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

A handwritten signature in black ink, appearing to read "S. Weihrouch", is written over a horizontal line.

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